Message

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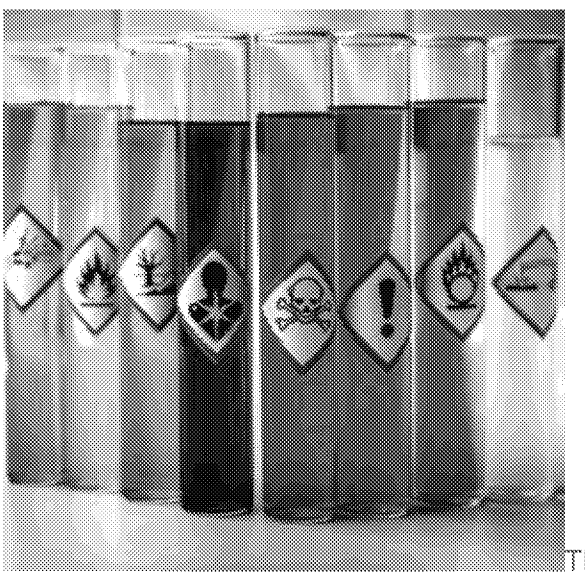
Subject: FW: Jen Sass blog: Toxic Chemical Industry and House Rs Attack on Science

EXPERT BLOG › JENNIFER SASS

Toxic Chemical Industry and House Rs Attack on Science

September 07, 2017 Jennifer Sass
https://www.nrdc.org/experts/jennifer-sass/toxic-chemical-industry-and-house-rs-attack-science

The Republican-led House Science Committee, – which routinely serves as a platform for the chemical manufacturers -- hosted an Oversight Hearing this week as part of its larger plan to slash the budget for the US Environmental Protection Agency (EPA) program that conducts rigorous hazardous assessments of industrial chemicals. You can imagine how popular this program – called the Integrated Risk Information System (IRIS) Program - is with the corporations that manufacture those profitable hazardous chemicals. Not very. Rep. Andy Biggs (R-AZ), the Environment Subcommittee Chairman authored an amendment to the House Appropriations bill (H.R.3354) to strip all funding for the IRIS program.


The Paley Rothman Blog, June 2016https://www.paleyrothman.com/legal-blog/historic-amendments-to-toxic-che...

EPA's IRIS program conducts health assessments of chemicals, and determines "acceptable" levels of exposure via air, water, food or soil. IRIS assessments are not regulations themselves, but they are frequently used by regulators – at the EPA, in the 50 states, and around the world – to set health-based standards for chemicals. Because an IRIS assessment can lead to new or strengthened protections from exposure to a toxic substance, the chemical industry has spent years fighting EPA efforts to complete those assessments, a process we chronicled in detail in our 2011 NRDC report, The Delay Game. Two of the three case studies in that report – formaldehyde and trichlorethylene or TCE - are still being contested by industry, and were a topic of this week's Oversight Hearing.

IRIS delays are largely due to industry interference and political delays

The IRIS program is falsely accused of being slow and unproductive. The truth is that the IRIS output has been delayed and hampered by interference from the chemical manufacturing industries whose profits would be reduced – and liabilities increased – by IRIS assessments linking their products to human health harms. This Oversight Hearing is one example of many such attempts to discredit and derail the important work of IRIS specifically, and EPA generally.

IRIS considers all available scientific information and data from all sources

The IRIS program is falsely accused of relying on poor quality science. The truth is that the IRIS program considers all available scientific data. It uses standard scientific approaches in a public forum with numerous opportunities for public comment and peer review. For these reasons it has received favorable reviews by the National Academies (see NAS 2014) and the EPA Scientific Advisory Board (SAB 2017). Most importantly, the IRIS conclusions have only ever been seriously challenged by the chemical industry and its consultants.

IRIS uses modern scientific consensus approaches and a public process for all its assessments

Dr. James Bus, a Republican witness at the Hearing, formerly with Dow Chemical Company and now with the industry consulting firm Exponent, criticized IRIS for failing to consistently rely on high quality studies for its assessments. In his spoken testimony, Bus said his idea of high quality studies were ones that adhered to 'Good Laboratory Practices', i.e. GLP standards. This is thinly disguised code for industry-sponsored studies designed to gain regulatory approval of the test substance. The GLP standards have been required for industry test labs since the 1970s after flagrant violations and fraud were identified (Industrial Bio-Test laboratory was shut down and its directors were imprisoned as a result of the investigations).

While GLP standards have some merit, they cannot be used to identify high and low quality studies. A 2014 National Academies of Sciences report pointed out the limitations of GLP standards, including that they fail to prevent flawed, unreliable or biased-by-design studies (pages 62-63). The same report praised the IRIS program chemical assessments.

The truth is that current scientific consensus is to use accepted systematic review methods to identify high and low quality studies (see National Toxicology Program). IRIS has done a brilliant job of this, and earned recent praise from its Scientific Advisory Board: "the program has fully adopted the principles of systematic review, and incorporated automation and publicly available software platforms to modernize the process." (SAB 2017)

Republican witnesses also criticized the IRIS program for failing to incorporate industry information early in the assessment process. The truth is that IRIS reaches out to industry and others at multiple phases of the assessment process. The SAB praised IRIS for this too, emphasizing that, "it is now standard practice for the [IRIS] program to engage stakeholders in an early scoping and problem formulation phase, thereby allowing stakeholders to provide important input at the very beginning of the process". (SAB 2017)

Industry scientists support industry interests – the truth about formaldehyde

Formaldehyde causes cancer in people. That is not in dispute. Breathing it increases the risk of developing nose and throat cancer (nasopharyngeal and sinonasal cancer). This has been established in both laboratory and epidemiologic studies, including studies by the National Cancer Institute of occupational exposures to workers that use or produce formaldehyde, and embalmers.

A Republican witness at the hearing, Dr. Kenneth Mundt of Ramboll Environ consulting, recently published an article denying a link between formaldehyde and leukemia. It was funded by the trade association of the chemical manufacturers, the American Chemistry Council.

Here is the truth about formaldehyde and leukemia:

- Workplace epidemiologic studies by NIOSH and by the National Cancer Institute report finding a risk of blood cancers (lymphohematopoietic cancers including Hodgkin lymphoma and multiple myeloma). These studies suggest that the risk is associated with the highest peak-exposures,(see for example: Pinkerton et al 2004; Bosetti et al 2008; Beane Freeman et al 2009; Zhang et al 2009; Hauptman et al 2009; NTP 2010; summary in NTP 2017).

- Leukemia studies are complicated by the fact that lymphohematopoietic cancers are slow moving and have a high survival rate and so are excluded from most workplace studies, which count deaths (mortality) but not illnesses (morbidity). This means that many studies may miss cancer cases.

- Although the mechanism by which formaldehyde may cause leukemia in people is not understood at this time, there are a number of plausible mechanisms. Importantly, while it is always helpful to understand the mechanism, it is not a prerequisite for establishing causality. Cancers are very complicated diseases and despite decades of research we still don't fully understand the processes very well, particularly at the molecular level. Similarly, we took drastic measures to protect children from lead by banning it in paint and then in fuel, long before scientists understood the exact mechanism for how it harms the brains of children.

Formaldehyde isn't Mundt's first foray into risk-denial as a business model. About 10 years ago, Mundt buried evidence showing low exposures to chromium were toxic, going so far as to withhold the data from the Occupational Safety and Health Administration (OSHA) during its rulemaking process. Mundt's study was funded by the chromium industry and the American Chemistry Council. The Washington Post reported, "Kenneth Mundt… did not have an explanation for why he ultimately

lumped workers together differently than they were in the initial, unpublished version -- a change that blended the intermediate-exposure workers with the low-exposure workers and resulted in a finding of no risk. Mundt said he was under no pressure from his industry sponsors to doctor the data." (Rick Weiss, Washington Post, Feb 24, 2006)

As a consultant for Philip Morris and the tobacco industry, Mundt attacked the National Cancer Institute's findings that low-tar cigarettes could cause lung cancer (see 2016 investigative series by David Heath).

Science is not wrong. But, scientists sure can be, and some accept pay to be wrong. (See many relevant examples in the book by David Michaels, Doubt is Their Product: How Industry's Assault on Science Threatens Your Health)

Thousands of businesses support chemical disclosure, transparency, and the EPA IRIS program

The American Sustainable Business Council (ASBC) and its members represent over 165,000 businesses and more than 300,000 individual entrepreneurs, executives, and investors across the United States, including local and state chambers of commerce, social enterprises, sustainable businesses, and investor and business incubators. These are the people that truly create jobs and strengthen the US economy, and they do it in a way that protects human health and the environment.

A few years ago, ASBC addressed the National Academies to defend EPA and the IRIS programs: "ASBC and its members believe that good science is an important foundation for innovation and business development, which in turn leads to job creation. For example, transparency in the reporting of potentially harmful chemicals allows businesses to create products that are safer for consumers. A safer marketplace helps to dispel consumer fears, spurs innovation, decreases legal liability, and increases shareholder value."

The ASBC says that consumer's demand for safer non-toxic products led to a growth in new markets - along with new jobs - for companies that avoid toxic ingredients. Government chemical hazard assessments provides critical information to companies wanting to compete in the marketplace with safer sustainable products.

A poll of ASBC member small business owners across the political spectrum found that over 90% of small business owners believe that:

- Chemical companies should be responsible for ensuring that chemicals are safe prior to entering the marketplace;
- Companies using chemicals of concern should disclose their presence to the public; and
- There should be an easily accessible database, available to the public, identifying chemicals of high concern to human and environmental health.

Disparaging and delaying hazard assessments of chemicals does not make chemicals safe, but rather than follow the ASBC approach, large chemical manufactures and House Republicans would rather shoot (or de-fund) the messenger,

We need EPA because the environment needs protecting

The witness for the Democrats, Dr. Thomas Burke, ended his testimony by praising the EPA and IRIS scientific and technical career staff. "They are dedicated and talented public servants and world-class scientists… They are there to take on the toughest environmental challenges we face. From the dusts of the World Trade Center and the faucets of Flint; to the toxic waters of Katrina and Harvey; they are there, working selflessly to protect our Nation's environment and public health. Our health depends on them."

Unfortunately, cancer-causing chemicals have their own lobby in Congress (the American Chemistry Council, ACC) and many friends in Congress, like Rep. Andy Biggs. This week's hearing provided further proof of that sad truth.

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Let there be no peace without justice, no worker without rights, no child without future, no elder without care, no individual without dignity. Let us take great care of Mother Earth. (adapted from Pope Francis on the Poor and Indigeous Peoples)